

Pedagogical professional education for students of Hanoi National University of Education to meet the requirements of innovation and improve the quality of teacher training

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Abstract

Nowadays, the modern world sets more requirements for the teacher position, especially in professionalism - a decisive element affecting the success and failure in pedagogy firms. *The objective of the research:* find effective solutions aiming at improving the quality of pedagogical professionalism education for students of Hanoi National University of Education, Vietnam, to meet the requirements of social innovation as well as upgrade the standards in teacher training. *Research Methodology:* We surveyed to collect information on the current status of pedagogical professionalism education for students of the Faculty of Psychology and Pedagogy in HNUE, Vietnam. Students: 203 people, including 95 male students and 108 female students (Students participating in the survey, concerning school years, are divided into 4 relatively even groups: first-year students; second-year students; third-year students and fourth-year students. Directors and lecturers in the Faculty of Psychology and Pedagogy in HNUE: 18 people. In which, the proportion of females has 15 directors and lecturers (accounting for 83.3%), the proportion of males has 3 officers and lecturers (accounting for 16.7%). The type of method that is used in this survey is a questionnaire. The phrase "questionnaire" refers to the set of questions you are asking an individual.

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A survey is the process of gathering, analyzing, and interpreting information from a large number of people. Its goal is to discover information about a group of people. We created 2 opinion poll samples. They are almost similar except for the target responders. One is for students and the other is for directors and teachers. *Research results:* Solutions proposed by the research team for implementation at HNUE: Solution 1: The organizations should improve training to raise awareness of the value of Pedagogical professionalism among administrators, lecturers, and students and the educating process of Pedagogical professionalism for students at HNUE's department of Psychology – Education; Solution 2: The leading department must implement a strategy for training Pedagogical professionalism for students at the University of Education's Psychology – Education department; Solution 3: School administrators need to build more discussion to develop and execute strategies to support Pedagogical professionalism; Solution 4: Guarantee for students at the University of Education to have the resources they have to participate in the process of improving Pedagogical professionalism; Solution 5: Checking, evaluating, and adjusting the process of developing pedagogical professionalism for students in the University of Education's Psychology – Education department.

Keywords: Professional-pedagogical competency, Professional pedagogical skills, Psychological follow-up of educational process

1. Introduction

Education is known as a phenomenon of forwarding historical and social experiences among generations. People who have specialized knowledge in any major can participate in social education with different levels, actively or randomly, either spontaneously or voluntarily.

The social education process contributes to the variety and complicity of each individuals' development. In specific, the impact of formal educational lecturers or professors (or pedagogical professions) plays a significant role, which is different from the influence of “non-professional educators” such as parents, unions, local communities, etc. (Fani Lauermann 2017; Louise Campbell 2019)

In terms of economic and social development strategy, Vietnam seems to focus mainly on improving education and training. Combined with new technology, those factors are considered a salient national policy to encourage human beings - the direct driving force of country growth in economic, cultural, and even scientific fields. The better the education quality is, the better the process of industrialization - modernization gains in international integration. Hence, the workforce in educational positions should be professionally trained to ensure the outcomes on the future country's human resources (M.Q. Khanh 2020; H.T.L Huong 2019).

Professionalism in education stands for a professional who works with high academic background, skills, standard manners, credibility, and efficiency. That is the reason why professionalism differs from amateurism without training in a specific field (Kwak, Young-Sun 2006).

Professional working aims to create perfection and synchronize every detail inconsistent, reasonable, and reliable. In practice, this factor can be expressed through the work performance result of individuals or organizations (Ingvarson, L.C. 2001; Mulhall, P., Berry, A, & Loughran, J. 2003; A.

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M. Novikov 2001). The professionalism of the school is presented by the professionalism of each teacher. Therefore, an important mission for every firm and school is to build "professional standards" and require all employees to comply. However, the professionalism of a teacher is still a new concept, which might not be specifically mentioned in any document before. Besides, professionalism also has been claimed in the past, but from various perspectives through other definitions, methods, industry research, and different concepts of the teacher; The pedagogical professionalism of teachers is a core basis for training high-quality human resources because when the lecturers put an effort into their educational target, they perform the career function - human and social development (NRC 1996; Voitovska, Oksana; Tolochko, Svitlana; Ridei, Natalia 2019; O Istrate, S Velea 2011).

These days, Vietnam is accelerating the process of industrialization and modernization of the country to integrate with world evaluation. In this way, the teacher's duty also needs to change regularly to adapt to modern requirements of the national and international environment, especially in the professionalism of teachers.

Currently, the quality of teaching workforce and training in general and the professional formation in practice is not high enough to meet the needs of society as well as the education sector (M.Q. Khanh 2020; H.T.L Huong 2019; P.T.K. Anh 2019).

2.Literature reviews

According to UNESCO research, the role of teachers has been changed in the following sections: assuming more functions than in the past, having more responsibility in selecting educational content, actively shifting from knowledge transfer to learning to organize for students, and trying to use up the source of knowledge collected in society. Furthermore, the lecturers need to put more emphasis on independent learning, improve the relationship between teacher to teacher, teacher to student, school to parents to get a better connection structure; also they should familiarize and utilize the modern technology in teaching aids. Besides, the person who is involved in teaching would be required to participate in not only inside but also outside activities of the school. There is a requirement for reducing and replacing the traditional type of prestige in their relationship with learners, especially with the older students and their parents (Cerqua, A., Gauthier, C. and Dembélé, M. 2014).

O. Lapuzina, Yu. Romanov, L. Lisachuk (2018) "Professional Ethics as an Important Part of Engineer Training in Technical Higher Education Institutions", highlights the importance of training professional and ethical teachers in the higher education system. However, the author has not identified the main characteristics of professionalism in this field as well as the professional training substance for future teachers in the higher education program.

In "Pedagogical Knowledge and the Changing Nature of the Teaching Profession" Guerriero, S. (ed.) (2017) initially revealed that professionalism is a personal quality for a teaching position and the manifestations of the teacher's professionalism are related to their style, health condition, and creativity level in the working progress. On the other hand, the research seems insufficient for the standard of the teacher's pedagogical professionalism.

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A.M. Novikov (1997) and (2001), “Professional education in Russia”, “Principles of the Democratization of Professional Education” pointed out that the professionalism of teachers depends on several personal indicators such as personal work experience, worldview vision, pedagogical thinking, pedagogical techniques and abilities, personal characteristics.

Based on research by M.Q. Khanh (2020), the study of В.Г ИВАНОВ và И.Р ИСКАВА (2014), “Student professionalism forming and the professionalization process at the University”, the content includes the concept of professionalism formation. The paper also defines numerous elements of professional education, points out the requirements for professional education and some appropriate methods, means, or forms of this kind of conception.

In the collaborating group work of Bjorn Marne Aakre, Takao Ito, Takayuki Kato (2014), "Pedagogical professionalism and Professionalization in Norway and Japan" stated that pedagogical professionalism and teacher professionalization have been frequently discussed as a considerable topic by educators and the media in recent years. The article relates to particular issues of the teacher education system in Japan and Norway, which is based on specialized document and management reviews, scientific reports, and teacher interviews. Thus, the paper identifies how the concept of professional pedagogy has changed over the past decades, whether people apply it efficiently in different interest groups related to students, teachers, and school owners. Moreover, pedagogical professionalism can also be explained by the use of various terms in certain countries. In general, the final result summarizes that pedagogical professionalism is the “association” of a variety of skills that makes the teacher position unique and different from other careers.

In “Three dimensional pedagogy: A new professionalism in educational contexts”, Dorothy Andrews, Lindy Abawi (2017) provides some evidence of teacher professionalism, which consists of the collaboration among each teaching individual. Therefore, the lecturer is a key factor to serve the diverse learning purposes and different study approaches of students. Based on the actual data in Australian schools as well as the investigation progress of the International Research team, the job description of educating position is determined in correlation to the overall structure of the school operation – The IDEAS process (the Innovative Designs for Enhancing Achievements in Schools). In this case, the process provides the networking for teachers to search and share individual strengths, or improve their competence in certain areas. This representation/establishment relates to a three-dimensional pedagogical concept, in which teachers bring individual pedagogical beliefs, authoritative values, and school-wide pedagogical principles (SWP - school-wide pedagogy). In practical terms, the general pedagogical principles seem relevant to the future school of interest, which is said to be a characteristic of collective commitment to high-quality teaching and learning activities for certain organizations. The main target focuses on the study needs of “our students” and “our context”, though this is quite sensitive to the whole system direction in general. The teacher is the one who leads the SWP development system, follows the criteria to adjust the efficiency then applies those principles into pedagogical practice. Therefore, the main ideas are the concept of micro-pedagogical in-depth, synthesizing and criticizing opinions progress, and contextual practices. These results are led by the professionalism of teachers, which changes not only the image of the teacher but also the overview of the whole educational institution.

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Due to R. Serezhnikova, I. Kranoschechenko, L. Vasilyev, N. Isayeva, S. Kasatkina (2018) "Pedagogical professionalism in terms of acme synergistic self – realization of the student in the conditions of pedagogical education at the university. pedagogy of pedagogical students in universities)" has confirmed that pedagogical professionalism is a quality in the lecturer's personality. The paper also conducted pedagogical professionalism analysis through the self-actualization method. Specifically, these authors show more attention to the significance of nonlinear sub-systems in personality structure development, including unity of personality to create more opportunities for self-improvement. This innovation can be accomplished through the intrinsic nature of humans represented by a complete structural and functional model of individual creative development. Also, efficient, creative development can come from the process of interacting with the surrounding environment such as educational activities with a system of pedagogical principles transformed from management to self-management, from external factors influence to internal incentives.

M.Q. Khanh (2017) released "Pedagogical professionalism improvement for lecturers in bachelor's degrees in Educational Psychology and Education at higher education institutions", which expressed the magnitude of pedagogical professionalism for lecturers teaching bachelor's degrees in Educational Psychology and Education at higher education institutions. The research analyzed the meaning and process of enhancing pedagogical professionalism for teachers. Besides, M.Q. Khanh etc., (2019) with "Theoretical issues in the formation of pedagogical professionalism for students at Vietnam's National University of Education nowadays" precisely studied the theoretical framework in the form of pedagogy for the students of Vietnam's National Universities of Education in the current period. Generally, the group research has initially defined some main characteristics of pedagogical professionalism and drew the way leading to this target for students of pedagogical universities of Vietnam.

To sum up, through previous investigating materials, we find out that most of the authors have been interested in forming pedagogical professionalism for students, but there has been no in-depth study following the three categories: theory, practice, and measurement for this topic. As a consequence, there should be more specialized research on how to educate pedagogical professionalism for pedagogical students because this is a matter of scientific and practical significance. Also, when this concept has been clarified and applied to reality, the outcome of teacher training can meet the requirements of what society needs as well as the Vietnamese educating innovation.

2. Theoretical framework

2.1. Perspectives on Pedagogical professionalism

In terms of linguistics, "professionalism" is a word with quite a wide-ranged meaning, and to define 'professionalism' as specific elements corresponding to each job position requires a whole piece of research and application work. People from different professions understand the term in different ways. For instance, professionalism in the sale is different from professionalism in accounting, professionalism for receptionists differs from professionalism for security guards, etc. Therefore, to develop and practice professionalism in a team or a corporation, key elements of professionalism for

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each job position should be defined and communicated to help members gain insight into what professionalism is.

There are various points of view on professionalism at work (Nadia Edmond & Mike Hayler 2013; Evetts 2012) has argued, the concept of professionalism has been interpreted both as an occupational or normative value and as a discourse to which practitioners, employers and managers appeal in the development and maintenance of work identities, career decisions and senses of self.

In general, most of them agree with the opinion "professionalism is confirmed by efficiency". Professionalism, to understand easily, is to focus on your profession. Anyone who works hard is likely to become a professional. When people focus and make every effort to learn and work, they will often manage to be excellent at their profession (Nadia Edmond & Mike Hayler 2013; Evetts 2012; M.Q. Khanh 2017). Professionalism includes the ability to arrange work under the work progress and the surrounding environment to increase productivity and become highly efficient. Fully understanding your stuff, and how long it would take to accomplish it, is one of the important elements of professional maturity and the one component that is concentrated on when professionalizing employees, whether at work or in educational and vocational contexts. Moreover, professionalism is expressed as a flexible and scientific work style, which is combined with mastering necessary in-depth knowledge of the profession (Irina P. Krasnoshchechenko, Raisa K. Serezhnikova, Vladimir Viktorovich Kolesov 2018)..

A professional work style is not only required in large-scale jobs but small tasks as well. The goal of developing professionalism in the workplace is to achieve perfection, and perfection is only possible when every small detail is completed asynchronously and consistently (Carmen Dalli 2008; Volkova, Natalia p., Tarnopolsky, Oleg b. & Olyinik, Irina V. 2019).

Based on research by (M.Q. Khanh 2020; Kwak, Young-Sun 2008; Irina P. Krasnoshchechenko ect., 2018), when it comes to "professionalism", people usually associate the term with a big deal. On the contrary, professionalism is indicated when we consider surprisingly small details in the work progress. A high-quality draft can serve as a solid foundation for the final version, and it can be completed more perfectly. It can be "pick up the phone within three rings", "do not be late for an appointment with a customer, if you are late for any reason, you must inform the customer in advance", "go to work on time", "approach customers with a friendly smile", "no sandals, slippers, shorts, colorful T-shirts or flashy clothes", etc. In a company, professionalism is "measured" by each of the company's employees. It is not surprising that major long-standing companies (mostly international ones) proactively develop themselves a "professional standard" and require their employees to do their best to reach it:

Firstly, the professionalism in the company spirit: the focus will be on the unity of the leaders and managers. "Company spirit," defined as pride in one's organization, a prevalent sense of purpose, pleasure and productive challenge in the organization's operations, stability in the workplace environment, and a sense of reciprocal support between members and the organization's management, necessitates particular criteria to grow. This main group needs to have a common sense about culture, common goals, and common needs. All of them should look in the same direction, and move forward together. One of the ways to form this feature is to gain the ability to work in a group.

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Group members should always feel satisfied when working together, otherwise, feel lost when working separately. They should be the people with high teamwork skills, who acknowledge the way to work and live as a team. They are known for their strong communication, collaboration, active listening, and problem-solving abilities. They are the ones who bring people closer and bind people together.

Second, the professionalism in thinking skills: the main tasks call for the wisdom of the most intelligent members, who need to think, discuss, and decide together. The more important the task is, the more attention and energy the intellectual discussion group should put into it.

Third, professionalism in information: the company needs the application of a rapid, smooth and accurate management information system. All working employees can access the information quickly and clearly. Its role is to assist key aspects of organizational management, such as communication, recordkeeping, decision making, data analysis, and so on. Companies use this data to improve their operations, develop strategies, and create value.

Fourth, professionalism in personnel and human resource management: It is the ability to find hidden potential candidates for training and development, as well as allocate suitable work to suitable people by analyzing people to identify individual strengths and weaknesses, and then delegating jobs and projects accordingly. A leader's responsibilities include effectively assigning tasks to team members.

Fifth, professionalism in branding: customers need brand recognition. Branding is an impression in the mind of your target market. It's an idea. It is what people think and feel when they consider your work, mission, and customer experience—all of the elements that comprise your company or organization. The company needs to prove that it is different from others. To be more specific, it needs its logo, brand, color palette, uniforms, signs, etc. which should all be unified and unique.

Sixth, professionalism in working: In a company, tasks should always be sorted out by considering their properties. In other words, tasks with different properties are considered as two completely separated tasks, then assigned to employees accordingly. People who are competent in one certain field should only be allocated jobs and tasks which have the right properties corresponding to that field to maximize efficiency.

In consequence, it cannot be denied that professionalism is a quality of an expert with a high level of education, outstanding skills, courteous manners, good communication, qualified and effective work, who can build and maintain credibility within the community. The significant gap between professionalism and amateurism is certainly training before having a hand in something and continuously improving while working.

The purpose of professionalism is to create perfection, so every detail needs to be in sync, consistent, reasonable, efficient, and reliable. Besides, professionalism is expressed through the process, methods, and results of work performed by individuals or organizations.

Hence, the professionalism of a school is assessed by the professionalism of each teacher in the school. That is also the reason why education organizations, schools, colleges, and universities, etc.

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have to create "professional standards" and one hundred percent of the employees are expected to comply with them.

The professionalism of a teacher (Pedagogical professionalism) is a comparatively new concept, which has not yet been specifically updated in any document. However, by looking into related definitions and reports, it is evident that the concept of teaching professionalism has been mentioned to some degree in various aspects.

We consider that:

Pedagogical professionalism is a qualification of teachers, which is characterized by a particular work style basing on great working skills, fully reach the required work ethics standards, in particular, and the required social ethics standards in general, as well as ensure the effective implementation of the objectives and responsibilities of teaching and educating students in schools.

By the definition mentioned, it can be inferred that Pedagogical professionalism refers to professional aspects, associated with a work style that is quick, serious, and effective. The work style should be firmly attached to every individual based on strict adherence to work ethics standards, in particular, and social ethics standards which are set by the nation as well as international standards in general, to optimize performance on the career path.

2.2. The Characteristics of Pedagogical Professionalism

The Characteristics of Pedagogical Professionalism includes the following basic features:

Firstly, Pedagogical professionalism is formed and developed under the influence of objective and subjective factors. Pedagogical professionalism is not originally available in every teacher. It is built up and developed over a long period under the influence of numerous objective and subjective elements. Subjective elements that affect mainly the process of forming and developing professional features are conditions and requirements for the growth of economy, culture, politics, and society. Objective elements play an important role in the process of formation and development of professional features. Some of those are the effects of family education, school education, social education, among which, the process of vocational education at vocational institutes, or universities of education to be specific, has a mass effect. Along with it, there is also the positive attitude of teachers in the process of participating in teaching training and retraining activities (M.Q. Khanh 2020; Kwak, Young-Sun 2008); Irina P. Krasnoshchechenko ect., 2018; Olimpius Istrate, Simona Velea 2011).

Second, Pedagogical professionalism is formed and developed in a long process. Pedagogical professionalism in each teacher is not an innate factor, it is formed and developed over a long period. Teachers have to experience a long process of training and retraining (M.Q. Khanh, N.N. Phuong 2017). Pedagogical professionalism is formed in Pedagogy students who are soon-to-be teachers through the training process. In the process of training teachers, the focus of pedagogical professionalism is integrated with many different activities. The various activities of the training process have helped each future teacher gradually develop a full and accurate sense of pedagogical professionalism as well as specific manifestations of pedagogical professionalism. As a result, these

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activities help every Pedagogy student step-by-step build the right attitude, appropriate behavior, and habits in the process of studying, practicing, and cultivating. In consequence, they can gradually develop and practice professionalism related to the profession that they opt for as their future career. Pedagogical professionalism is continuously improved within a teacher's work style by experiencing specialty retraining and self-improvement activities. When performing their teaching activities, teachers have to face the innovations of the study programs, the content of the teaching activities, and the improvement of learners – people who are being educated. Teachers are also able to participate in abundant activities to build on specialty and enhance job qualifications. In addition, teachers are always encouraged to be self-disciplined, positive, and proactive in self-improvement. Through these activities, the capacity and qualifications, in general, and pedagogical professionalism of teachers, in particular, are advanced little by little (M.Q. Khanh 2020; Kwak, Young-Sun 2008; Olimpius Istrate, Simona Velea 2011).

Thirdly, Pedagogical professionalism contains both the general features of professionalism in workers and particular characteristics. Teachers who are workers in the field of pedagogy have to form themselves the appropriate competencies and characteristics of employees. Therefore, the Pedagogical professionalism of teachers has some similarities with the professionalism of workers in general. On another hand, because teachers work in a special field that is presented in various types of activities, their Pedagogical professionalism also possesses unique characteristics associated with these types of activities. These peculiarities are all related to the manifestations of Pedagogical professionalism (M.Q. Khanh 2020).

Fourth, Pedagogical professionalism has an important role as it affects the quality of pedagogical work of teachers. In these modern days, we can see that the fundamental difference between professional and non-professional workers is clearly shown in the products that workers work on. With dedication in professional activities, a professional teacher (or a teacher with pedagogical professionalism) will generate a product with good quality, which is a higher and higher development level in terms of ability, strengths, and characteristics of learners - educated people (M.Q. Khanh 2020; M.Q. Khanh, N.N. Phuong 2017).

Fifth, the professionalism Pedagogy is constantly being advanced according to the development of individual careers, the standards of the occupation, in particular, and the requirements of the society, in general. The social and job context always brings about modern and higher requirements to employees which includes teachers. These requirements put the focus on the goal of improving the quality of operating products that correlate with every new development stage of the society and the industry. That situation makes it necessary for each teacher to constantly refine their capacity and job qualification in general and pedagogical professionalism in particular. In other words, the primary elements of pedagogical professionalism are essential to be mastered by teachers regarding the modern requisites of society and the industry. They facilitate teachers to adapt a lot easier to these new requirements so that they are capable of participating in job activities, creating more and more high-quality results (Olimpius Istrate, Simona Velea 2011).

3. Research methods

- **Research Objectives**

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Find effective solutions aiming at improving the quality of pedagogical professionalism education for students of Hanoi National University of Education (HNUE), Vietnam, to meet the requirements of social innovation as well as upgrade the standards in teacher training.

- **Research Contents**

We survey the following key topics:

- The current status of awareness about the educational process of Pedagogical professionalism for students of the Faculty of Psychology and Pedagogy in HNUE.
- The current status of implementation of the educating process of Pedagogical professionalism for students of the Faculty of Psychology and Pedagogy in HNUE.

- **Research Scope**

We surveyed to collect information on the current status of pedagogical professionalism education for students of the Faculty of Psychology and Pedagogy in HNUE, Vietnam.

Students: 203 people, including 95 male students and 108 female students. Students participating in the survey, concerning school years, are divided into 4 relatively even groups. First of all, there are 50 first-year students (freshman) making up roughly 24.6% of the total number. The number of second-year students (sophomore) in the survey is the same as that of freshmen, whose rate is also 24.6%. Besides, the percentage of third-year students (junior) - the highest among the 4 groups - is 25.6% corresponding to 52 students. Lastly, there are 51 fourth-year students (senior) accounting for 25.2% of the total number.

Directors and lecturers in the Faculty of Psychology and Pedagogy in HNUE: 18 people. In which, the proportion of females has 15 directors and lecturers (accounting for 83.3%), the proportion of males has 3 officers and lecturers (accounting for 16.7%).

- **Survey Method**

The type of method that is used in this survey is a questionnaire.

The phrase "questionnaire" refers to the set of questions you are asking an individual. A survey is the process of gathering, analyzing, and interpreting information from a large number of people. Its goal is to discover information about a group of people.

We created 2 opinion poll samples. They are almost similar except for the target responders. One is for students and the other is for directors and teachers.

- **Data Analysis and Interpretation**

The process of systematically applying statistical and/or logical methods to classify and demonstrate, condense and recapitulate, and analyze information is known as data analysis.

The survey data were collected, classified, and checked by the research team. To be specific, the team paid attention to the data sorting process. Data that is considered to have errors or provide

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inaccurate statistics by the research team will be precisely re-implemented to ensure that the obtained data source accurately reflects the opinions of the respondents.

Data is processed corresponding to each criterion. Within each criterion, statistics will be shown as numbers and percentages. From the reported statistics, we are able to infer assessments and comments about the status of each surveyed criterion.

Based on the assessments from the survey results, the research team makes suggestions towards improving the quality of Pedagogical professionalism education for HNUE Vietnam students, targeting meeting the requirements of social innovation as well as upgrading the standards in teacher training.

4. Results

- The awareness status of Pedagogical professionalism among the target group including directors, lecturers, and students of the Faculty of Psychology and Pedagogy in HNUE is shown in Table 1a and Table 1b.

In which:

Awareness 1.1: Pedagogical professionalism only exists in teachers; Awareness 1.2: Pedagogical professionalism has some similarities with the professionalism of general workers; Awareness 1.3: Pedagogical professionalism is a distinctive quality of a teacher; Awareness 1.4: Pedagogical professionalism is characterized by a particular work style based on high expertise and professionalism level; Awareness 1.5: The teacher's Pedagogical professionalism has an impact on the quality of teaching and educating activities.

Table 1a. Survey on the awareness status of Pedagogical professionalism among directors and lecturers working as a member of the Faculty of Psychology and Pedagogy in HNUE.

Statements	Level of agreement					
	Disagree		Uncertain		Agree	
	Qty	%	Qty	%	Qty	%
Awareness 1.1		30.5	27	13.3	114	56.2
Awareness 1.2	21	10.3	38	18.7	144	70.9
Awareness 1.3	15	7.4	29	14.3	159	78.3
Awareness 1.4	16	7.9	17	8.4	170	83.7
Awareness 1.5	7	3.4	19	9.4	177	87.2

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Table 1b. Survey on the awareness status of Pedagogical professionalism among students of, the Faculty of Psychology and Pedagogy in HNUE.

Description	Level of agreement					
	Disagree		Uncertain		Agree	
	Qty	%	Qty	%	Qty	%
Awareness 1.1	62	30.5	27	13.3	114	56.2
Awareness 1.2	21	10.3	38	18.7	144	70.9
Awareness 1.3	15	7.4	29	14.3	159	78.3
Awareness 1.4	16	7.9	17	8.4	170	83.7
Awareness 1.4	7	3.4	19	9.4	177	87.2

- The status of awareness of the role of Pedagogical professionalism of teachers in teaching activities among directors, lecturers and students of the Faculty of Psychology and Pedagogy at HNUE is shown in Table 2a and Table 2b.

Table 2a. Survey on the awareness status about the role of Pedagogical professionalism of teachers in teaching activities among directors and lecturers of the Faculty of Psychology and Pedagogy in HNUE.

Level of Importance	Qty	%
Very important	15	83,3
Important	3	16,7
Neutral	0	0,0
Somewhat unimportant	0	0,0
Unimportant	0	0,0
Total	18	100,0

Table 2b. Survey on the awareness status about the role of Pedagogical professionalism of teachers in teaching activities among students of the Faculty of Psychology and Pedagogy in HNUE.

Level of Importance	Qty	%
Very important	116	57,1

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Important	79	38,9
Neutral	6	3,0
Somewhat unimportant	1	0,5
Unimportant	1	0,5
Total	203	100,0

- The status of awareness of directors and lecturers of the Faculty of Psychology and Pedagogy in HNUE about the features of Pedagogical professionalism.

The features of Pedagogical professionalism are specific elements that are closely associated with the qualities of professional workers in pedagogical activities. It is a vital foundation for us to define the concept of Pedagogical professionalism. Therefore, the accurate identification of the features of Pedagogical professionalism plays a significant role.

Survey results on the status of the awareness level of directors, lecturers, and students of the Faculty of Psychology and Pedagogy in HNUE under HNUE about the features of Pedagogical professionalism is shown in Table 3a and Table 3b.

In which:

Feature 3.1: Pedagogical professionalism is formed and developed under the influences of objective and subjective factors; Feature 3.2: Pedagogical professionalism is formed and developed in a long process; Feature 3.3: Pedagogical professionalism contains both the general features of professionalism in employees and particular qualities; Feature 3.4: Pedagogical professionalism has an important role as it affects the quality of teachers' pedagogical work; Feature 3.5: Professionalism Pedagogy is constantly being advanced according to the development of individual careers, the standards of the occupation, in particular, and the requirements of society, in general.

Table 3a. Awareness of managerial staff and lecturers at HNUE’s department of Psychology – Education about the characteristics of Pedagogical professionalism.

The characteristics of pedagogical professionalism	Degree evaluation									
	Totally agree		Agree		Neutral		Disagree		Totally disagree	
	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%
Feature 3.1	11	61.1	7	38.9	0	0	0	0,0	0	0,0
Feature 3.2	11	61.1	7	38.9	0	0	0	0,0	0	0,0

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Feature 3.3	11	61.1	5	27.8	2	11.1	0	0,0	0	0,0
Feature 3.4	13	72.2	5	27.8	0	0	0	0,0	0	0,0
Feature 3.5	13	72.2	3	16.7	2	11.1	0	0,0	0	0,0

Table 3b. Awareness of students at HNUE’s department of Psychology – Education about the characteristics of Pedagogical professionalism.

The characteristics of pedagogical professionalism	Degree evaluation									
	Totally agree		Agree		Neutral		Disagree		Totally disagree	
	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%
Feature 3.1	46	22.7	143	70.4	6	3.0	5	2.5	3	1.5
Feature 3.2	74	36.5	98	48.3	17	8.4	11	5.4	1	1.5
Feature 3.3	66	32.5	99	48.8	22	10.8	12	5.9	4	2.0
Feature 3.4	88	43.3	88	43.3	13	6.4	12	5.9	2	1,0
Feature 3.5	103	50.7	80	39.4	12	5.9	5	2.5	3	1.5

- Awareness of managerial staff, lecturers, and students at HNUE’s department of Psychology – Education about the expression of Pedagogical professionalism.
- Expressions of pedagogical professionalism are specific manifestations of virtues of professional workers in pedagogical activities; it is also the standard to identify the professional teacher and the criterion for assessing the teacher’s Pedagogical professionalism.
- The results of a survey on the real situation of awareness of managerial staff, lecturers, and students at HNUE’s department of Psychology – Education about the expression of Pedagogical professionalism are shown through particular contents in Table 4a and Table 4b.

Including:

Feature 4.1: Making a plan; Feature 4.2: Sense of responsibility; Feature 4.3: Work-focused; Feature 4.4: Updating a regular basis on professional knowledge; Feature 4.5: Working independence, self-control, and a collaborative spirit; Feature 4.6: Disciplined attitude; Feature 4.7: Business etiquette; Feature 4.8: Communication and behavior; Feature 4.9: Suitable clothes; Feature 4.10: Relaxation in a sensible way.

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Table 4a. Awareness of managerial staff, lecturers at HNUE’s department of Psychology – Education about the expression of Pedagogical professionalism.

Feature	Degree evaluation									
	Totally agree		Agree		Neutral		Disagree		Totally disagree	
	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%
Feature 4.1	11	61.1	7	38.9	0	0.0	0	0.0	0	0.0
Feature 4.2	13	72.2	4	22.2	1	5.6	0	0.0	0	0.0
Feature 4.3	12	66.7	5	27.8	1	5.6	0	0.0	0	0.0
Feature 4.4	11	61.1	5	27.8	2	11.1	0	0.0	0	0.0
Feature 4.5	9	50.0	8	44.4	1	5.6	0	0.0	0	0.0
Feature 4.6	12	66.7	6	33.3	0	0.0	0	0.0	0	0.0
Feature 4.7	9	50.0	7	38.9	1	5.6	0	0.0	0	0.0
Feature 4.8	12	66.7	5	27.8	1	5.6	0	0.0	0	0.0
Feature 4.9	7	38.9	10	55.6	1	5.6	0	0.0	0	0.0
Feature 4.10	3	16.7	11	61.1	3	16.7	0	0.0	0	0.0

Table 4b. Awareness of students at HNUE’s department of Psychology – Education about the expression of Pedagogical professionalism.

Feature	Degree evaluation									
	Totally agree		Agree		Neutral		Disagree		Totally disagree	
	Qty	%	Qty	%	Qty	%	Qty	%	Qty	%
Feature 4.1	70	34.5	130	64.0	3	1.5	0	0.0	0	0.0
Feature 4.2	93	45.8	105	51.7	5	2.5	0	0.0	0	0.0
Feature 4.3	111	54.7	87	42.9	5	2.5	0	0.0	0	0.0
Feature 4.4	111	54.7	79	38.9	13	6.4	0	0.0	0	0.0
Feature 4.5	101	49.8	93	45.8	9	4.4	0	0.0	0	0.0
Feature 4.6	113	55.7	82	40.4	8	3.9	0	0.0	0	0.0

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Feature 4.7	90	44.3	93	45.8	20	9.9	0	0.0	0	0,0
Feature 4.8	113	55.7	86	42.3	4	2.0	0	0,0	0	0,0
Feature 4.9	101	49.8	93	45.8	9	4.4	0	0,0	0	0,0
Feature 4.10	99	48.8	91	44.8	13	6.4	0	0.0	0	0,0

5. Exchange and discussion

- Awareness of Pedagogical professionalism

+ The majority of the HNUE Psychology – Education department managerial staff and lecturers who participated in the survey were completely aware of the basic notion of Pedagogical professionalism. This is perfectly reasonable, because managers, lecturers of HNUE have high levels of professional skills with a lot of experience in occupational activities, so they can easily identify the basic concepts of Pedagogical professionals. However, there is still a minor division of survey subjects who are still confused and have not identified the main factors of Pedagogical professionalism. This is a significant impediment for this group of managers and lecturers in terms of self-improvement and pedagogical professional growth, as well as coordinating the process of pedagogical professionalism formation for students.

+ The majority of the HNUE Psychology – Education department students who participated in the study were completely aware of the basic notion of Pedagogical professionalism, however, there are still minor departments that have not identified the main factors of Pedagogical professionalism. This is a significant impediment for students in terms of self-improvement and pedagogical professional growth. The current state of study on this issue necessitates that the leaders of Hanoi National University of Education investigate and implement ways to increase student awareness, assisting them in completely and correctly identifying the features of Pedagogical professionalism.

- Awareness of the role of Pedagogical professionalism for teacher’s professional activities.

+ Awareness of managers and lectures at HNUE’s department Psychology – Education, proves that:

According to several explanations: A teachers’ pedagogical professionalism is a specific-characteristics that should be present.

According to other viewpoints: Personality education can only be achieved by character through professionalism.

Other people’s points of view: Pedagogical professionalism has a direct impact on the teaching quality of teachers, as well as the attitude and training of students in excellent values.

According to statistics, 100% of managerial staff and lecturers at HNUE who took part in the survey are fully aware of the importance of Pedagogical professionalism in teachers' professional activities. There is no such thing as a “Less important” or “Not important” perspective, which makes it easier

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for managerial staff and lecturers to give more attention to organizing and implementing Pedagogy professionalism for students of HNUE.

According to student survey data, the majority of students recognized the value of Pedagogical professionalism for instructors. This provides an ideal environment for students to actively participate in the training process, put in effort, self-study, and practice to improve Pedagogical professionalism over time. However, some students are still unaware of the need for teacher Pedagogical expertise. Because of the current level of the research report, the university must continue to investigate and execute relevant activities to gradually enhance students' knowledge of the need for Pedagogical professionalism for instructors. This is essential because students understand the value of Pedagogical professionalism to teachers, they will spend more effort and time learning and practicing to achieve better and better results in the process of developing Pedagogical professionalism for themselves.

- Awareness of characteristics of Pedagogical professionalism.

+ The majority of the HNUE Psychology – Education department managerial staff and lecturers who participated in the study were completely aware of the basic features of Pedagogical professionalism. Because the management and lecturers in the Psychology – The education department of HNUE are of a high level of qualification, skills, and experienced in work practice, they can easily establish the basic characteristics of Pedagogical professionalism.

On the other hand, the results of the research revealed that a small percentage of survey respondents are still confused and have not identified the criteria of Pedagogical professionalism. This is a lack of ability in personal own self-improvement and professional Pedagogy development.

The results of the research state of awareness of school administrators in HNUE's Psychology – Education department about the characteristics of pedagogical professionalism require the school leadership researching and implementing cognitive-behavioral therapy measures for managerial staff and lecturers in the Psychology – Education Department.

+ The majority of the HNUE Psychology – Education department students who participated in the study would have full awareness of the basic features of Pedagogical professionalism. This is entirely acceptable because students in the Department of Psychology – Education learn and practice in a dynamic and professional environment, which allows them to easily understand the fundamental qualities of pedagogical professionalism. However, a tiny part of the research participants are still confused and have not simply identified the features of pedagogical professionalism yet.

- Awareness of the expression of Pedagogical professionalism.

+ The results of the research revealed that the majority of school administrators in HNUE's Psychology – Education department were aware of Pedagogical professionalism manifestations. However, a tiny portion of the research participants still has yet to clearly express this expression.

+ The majority of the HNUE Psychology – Education department students who participated in the study were completely aware of the basic features of Pedagogical professionalism. This creates a conducive environment for students to participate in the training process in general, and the process

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of establishing pedagogical professionalism in particular, all while training themselves to become pedagogical professionals. However, a few students in the study are unaware of educational professionalism expressions. This will be a significant challenge for students in the process of vocational training in general and the creation of professionalism in particular.

As a result, the university must appear to execute training activities to enhance awareness of specific expressions of pedagogical professionalism between managerial staff, lecturers, and students in the Psychology - Education Department of HNUE. This is a critical issue for school principals to identify to better coordinate the process of establishing pedagogical professionalism for students and to support students in the department of Psychology – Education at Hanoi National University of Education in proactively determining their orientation in the learning and training process to form pedagogical professionalism.

Recommendations

The recommended pedagogical professionalism measure for HNUE students must be suitable for the students' characteristics and have the impact of encouraging students' positivity, self-discipline, initiative, and independence in training and education.

Pedagogical professionalism for Department of Psychology students aims to maintain the quality of the school's professional lecturers training, which means defining appropriate ways to influence the system and providing conditions for the operation to function effectively.

Methods to educate Pedagogy professionalism for students of HNUE's Psychology – Education department proposed to solve a particular task have already and will be included in the system of assessments to train teachers to achieve the common goal of improving the quality of professional teacher training.

Methods in the implementation organization have to create synchronization, consistency, and eliminate overlap. These steps will promote creativity in the system, ensuring that the goal of professional teacher preparation is achieved. Each measure is a link in the system chain, with a relationship and support to guarantee that the process of learning Pedagogical professionalism for students is synchronous and successful. If the approach is taken carelessly, its effectiveness will be decreased, and the intended goal will not be achieved.

The measure's practicality and efficacy are crucial factors to consider when deciding what is or is not effective. Therefore, the measures to educate Pedagogical professionalism for students at HNUE should be suitable with the university's present conditions and situation, as well as administrators' and lecturers' ability, promoting available advantages, overcoming limitations, and ensuring the resumption of the process of educating Pedagogical professionalism for students at the Department of Psychology – Education.

Solutions proposed by the research team for implementation at HNUE.

+ Solution 1: The organizations should improve training to raise awareness of the value of Pedagogical professionalism among administrators, lecturers, and students and the educating process of Pedagogical professionalism for students at HNUE's department of Psychology – Education.

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- + Solution 2: The leading department must implement a strategy for training Pedagogical professionalism for students at the University of Education's Psychology – Education department.
- + Solution 3: School administrators need to build more discussion to develop and execute strategies to support Pedagogical professionalism.
- + Solution 4: Guarantee for students at the University of Education to have the resources they have to participate in the process of improving Pedagogical professionalism.
- + Solution 5: Checking, evaluating, and adjusting the process of developing pedagogical professionalism for students in the University of Education's Psychology – Education department.

6. Conclusions

Pedagogical professionalism is built up in students of University of Education students during their training. As a result, school authorities and lecturers should determine and execute the targets, contents, fundamentals, and paths that form professional Pedagogy for students on a regular and continuous basis. At the same time, it is critical to pay attention to regular behavior testing and evaluation of the results of forming Pedagogical professionalism for students. Besides that, once helping to organize the process of preparing Pedagogical professionalism for students of the University of Education, administrators and lecturers should fully identify and take advantage of the impact of factors impacting this advancement.

The research team recommends that the methods proposed in this research be accomplished to improve the quality and effectiveness of Pedagogical education for students at HNUE's department of Psychology – Education.

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References

- [1]. Aakre, B.M., Ito, T. & Kato, T. (2014). Pedagogical professionalism and professionalization in Norway and Japan. <http://nordopen.nord.no>
- [2]. A.M. Novikov (1997). Professional education in Russia. – M., 1997. – p.253.
- [3]. A. M. Novikov (2001) Principles of the Democratization of Professional Education, Russian Education & Society, 43:9, 22-36, DOI: 10.2753/RES1060-9393430922
- [4]. Andrews, D., & Abawi, L. (2017). Three-dimensional pedagogy: A new professionalism in educational contexts. *Improving Schools*, 20(1), 76-94. <https://doi.org/10.1177/1365480216652025>
- [5]. Carmen Dalli (2008). Pedagogy, knowledge and collaboration: towards a ground-up perspective on professionalism, *European Early Childhood Education Research Journal*, 16:2, 171-185, DOI: 10.1080/13502930802141600
- [6]. Cerqua, A., Gauthier, C. and Dembélé, M. (2014), "Education Policy, Teacher Education, and Pedagogy: A Case Study of UNESCO", *Annual Review of Comparative and International Education 2014 (International Perspectives on Education and Society, Vol. 25)*, Emerald Group Publishing Limited, Bingley, pp. 235-266. <https://doi.org/10.1108/S1479-367920140000025016>

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Nguyen Dang Trung, Tran Trung Tinh, Vu Viet Hung, Duong Van Khoa, Cao Danh Chinh,
Tran Dinh Chien, LeNhu Thuy

- [7]. Evetts, J. 2012. Professionalism in Turbulent Times: Changes, Challenges and Opportunities. Paper presented at the ProPel International Conference, 9–11th May in Stirling
- [8]. Fani Lauermann (2017). Teacher motivation, responsibility, pedagogical knowledge and professionalism: a new era for research. Centre for Educational Research and Innovation. Pages: 171 - 191. <https://doi.org/10.1787/9789264270695-10-en>
- [9]. Guerriero, S. (ed.) (2017), Pedagogical Knowledge and the Changing Nature of the Teaching Profession, Educational Research and Innovation, OECD Publishing, Paris, <https://doi.org/10.1787/9789264270695-en>.
- [10]. Ha Thi Lan Huong (2019). Proposing a number of professional capabilities of teacher 4.0 for education students. Journal of Educational Sciences, Hanoi National University of Education, Vietnam, Volume 64, Issue 2A, pp. 38-49. DOI: 10.18173/2354-1075.2019-0022
- [11]. Ingvarson, L.C. (2001). Strengthening the Profession: A Comparison of Recent Reforms in the USA and the UK. Australian College of Education Seminar Series. ACE: Canberra
- [12]. Irina P. Krasnoshchchenko, Raisa K. Serezhnikova, Vladimir Viktorovich Kolesov (2018). Formation of the professionalism of the personality of the future teacher in the process of preparation in graduate school. Journal: Astra Salvensis - revista de istorie si cultura, Issue VI, No: Supp 2, pp. 107-114
- [13]. Kwak, Young-Sun (2006). Definition of Pedagogical Content Knowledge and Ways of Raising Teaching Professionalism as Examined by Secondary School Science Teachers. Journal of The Korean Association For Science Education. Volume 26, Issue 4, Pages.527-536
- [14]. Kwak, Young-Sun (2008). Research on Characteristics of Teacher Professionalism by the Type of Science Pedagogical Content Knowledge. Journal of The Korean Association For Science Education, Volume 28 Issue 6, pp.592-602
- [15]. Louise Campbell (2019) Pedagogical bricolage and teacher agency: Towards a culture of creative professionalism, Educational Philosophy and Theory, 51:1, 31-40, DOI: 10.1080/00131857.2018.1425992
- [16]. Mai Quoc Khanh (2020). Current status of forming pedagogical professionalism for undergraduates in Hanoi National University of Education, Journal of Educational Sciences, Hanoi National University of Education, Vietnam, Vol. 65, No. 4, p. 48-59, DOI: 10.18173/2354-1075.2020-0056
- [17]. Mai Quoc Khanh and Nguyen Nam Phuong (2017). Pedagogical professionalism improvement for lecturers in bachelor's degrees in Educational Psychology and Education at higher education institutions. Scientific conference, Vietnam.
- [18]. M.Q. Khanh etc., (2019). Theoretical issues in the formation of pedagogical professionalism for students at Vietnam's National University of Education nowadays" Science and technology project at the university level, code SPHN 16-02.
- [19]. Mulhall, P., Berry, A, & Loughran, J.(2003). Frameworks for representing science teachers' pedagogical content knowledge. Asia-Pacific Forum on Science Learning and Teaching, 4(2), Article 2
- [20]. Nadia Edmond & Mike Hayler (2013) On either side of the teacher: perspectives on professionalism in education, Journal of Education for Teaching, 39:2, 209-221, DOI: 10.1080/02607476.2013.765193
- [21]. NRC (1996). National Science Education Standards. Washington, EC: National Academy Press
- [22]. O Istrate, S Velea (2011). Professionalism in the education system today. The 6th International Conference on Virtual Learning ICVL 2011. University of Bucharest and "Babeş-Bolyai" University of Cluj-Napoca.
- [23]. O. Lapuzina, Yu. Romanov, L. Lisachuk (2018). Professional Ethics as an Important Part of Engineer Training in Technical Higher Education Institutions. The New Educational Review. Vol. 54, No. 4, p. 110-121. DOI: 10.15804/tner.2018.54.4.09
- [24]. Olimpius Istrate, Simona Velea (2011). Professionalism in the Education System Today. The 6th International Conference on Virtual Learning ICVL 2011, University of Bucharest and "Babeş-Bolyai" University of Cluj-Napoca.
- [25]. Pham Thi Kim Anh (2019). Some theoretical issues about teacher assessment need to be trained to meet the requirements of general education innovation. Journal of Educational Sciences, Hanoi National University of Education, Vietnam, Volume 64, Issue 1, pp. 185-194. DOI: 10.18173/2354-1075.2019-0036
- [26]. Voitovska, Oksana; Tolochko, Svitlana; Ridei, Nataliia (2019). Professional and Pedagogical Culture and Teachers' Professional Competence as Components of their Professionalism. Education - Technology - Information Technology, No. 4/30. www.eti.rzeszow.pl. DOI: 10.15584/eti.2019.4.32

Pedagogical professional education for students of Hanoi National University of Education to meet the requirements of innovation and improve the quality of teacher training

- [27]. Volkova, Natalia p., Tarnopolsky, Oleg b. & Olyinik, Irina V. (2019). The individual style of speech of teachers from higher education institutions as an indicator of pedagogical professionalism. *Revista Espacios digital*, Vol. 40, No. 17